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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/801,809 | 03/15/2004 | Laszlo Hars | US03 0060 | 1911 |
| 24738 | 7590 | 05/02/2007 | EXAMINER | |
| PHILIPS ELECTRONICS NORTH AMERICA CORPORATION INTELLECTUAL PROPERTY & STANDARDS 1109 MCKAY DRIVE, M/S-41SJ SAN JOSE, CA 95131 | | | YAARY, MICHAEL D | |
| | | ART UNIT | | PAPER NUMBER |
| | | 2193 | | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/801,809 | HARS, LASZLO | |
| | Examiner | Art Unit | |
| | Michael Yaary | 2193 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 15 March 2004.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-20 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-20 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 15 March 2004 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Detailed Action

1. Claims 1-20 are pending in the application.

Objections

2. Claims 4-7, and 9 are objected to because of the following informalities:
 - (i) Claim 4, line 8 has a misspelling of the word "having."
 - (ii) Claim 5, line 7 has a misspelling of the word "pair."
 - (iii) Claim 6, line 1 has a misspelling in the words "wherein the."
 - (iv) Claim 7, line 1 has a misspelling of the word "generator."
 - (v) Claim 9, line 2 has a misspelling of the word "flip."

Appropriate corrections are required.

Drawings

3. The drawings are objected to under 37 CFR 1.83(a) because they fail to show the limitations as described in [0023] of the specification. Figure 3b is directed to a specific arrangement of the flip-flops used in the random number generator. However, the description in [0023] of the specification does not correspond to figure 3b that was filed. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing

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sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. As to claims 1-20 the claims are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

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As to claims 1 and 11, the claims are non-statutory as they fail to produce a "useful, concrete, and tangible result." *State Street Bank & Trust Co. v. Signature Financial Group Inc.*, 149 F. 3d 1368, 1373-74 (Fed. Cir. 1998). The claims are directed to nothing more than a circuit arranged in a manner to produce a random signal as an output. The claims fail to provide a useful, concrete, and tangible result using the output of the specific arrangement, and thus fail to indicate how the invention accomplishes a practical application. Suggested ways to overcome the rejection would be to incorporate into the claims, as taught in the specification, ways in which the random signal output is used in a practical application.

(ii) Claims 2-10, and 12-20 are rejected for similar reasons as discussed for their respective parent claims, as they fail to present any limitations that resolve the deficiencies of the claim from which they depend.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 2, 7-12, and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujita et al. (hereafter Fujita)(US Pub. 2003/0061250) in view of Schulz (US Pat. 4,905,176).

8. **As to claims 1 and 11,** Fujita discloses a plurality of groups of independent flip-flops each of the groups having different configurations (five UFFs (flip-flops) of figure 18A each having different voltages, thus having different configurations.); and

Each of the outputs of the plurality of groups of flip-flops being connected in an exclusive-or (XOR) network (UFF outputs each connected to XOR in figure 18A),

Wherein a metastable output of at least one flip-flop of the plurality of groups of flip-flops causes a random signal to be output by the XOR network for number generation ([0049], lines 1-9; [0050], lines 1-4; [0056], lines 1-10; and [0084], lines 1-7).

9. Fujita does not disclose a latch connected to the output of the XOR network.

However, Schulz discloses a latch connected to the output of the XOR network (latch 26 of figure 4).

10. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Fujita, by connecting a latch to the XOR output, as taught by Schulz, in order to sample the random signal at low frequency.

11. **As to claims 2 and 12,** Fujita further discloses wherein the groups of flip-flops are divided into at least three equally sized groups (five groups of flip-flops in figure 18A).

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12. **As to claims 7 and 17,** Fujita further discloses the groups of flip-flops have unequal numbers of flip-flops in each group (Inherent in figure 18A, as the number of flip-flops present is none other than a preference of a design choice for the circuit, thus being able to have an equal or unequal amount of flip-flops in each group.).

13. **As to claims 8 and 18,** Schulz discloses each of the groups of flip-flops have different delay values (column 6, lines 41-49).

14. **As to claims 9 and 19,** Fujita further discloses a portion of the flip-flops are NAND gates, and the remainder are Boolean equivalents of NAND gates ([0116], lines 1-7).

15. **As to claims 10 and 20,** Fujita further discloses the groups of flip-flops are arranged into one of thirds or fifths (the flip-flops are divided into 5 groups in figure 18A).

Allowable Subject Matter

16. Claims 3-6 and 13-16 are objected to as being dependent upon rejected base claims, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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17. Claims 3-6 and 13-16 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 101, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Yaary whose telephone number is (571) 270-1249. The examiner can normally be reached on Monday-Friday, 8:00 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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